Claims

1. A structure, especially a slope-supporting structure and/or noise-barrier structure, with the following features:

   a) The structure comprises at least one essentially rigid supporting structure designed as a projection that has a plurality of support elements arranged one above the other in tiers (E), as well as at least one compound filler that consists at least partially of bonding-agent-free granulate material and/or bulk material and/or soil material;

   b) the supporting structure is connected to at least one anchoring device, and preferably a plurality of such anchoring devices, that extend into the compound filler;

   characterized by the following features:

   c) at least one anchoring device (AV1) is designed as a overturning-moment receiver that is designed to be resistant to bending in at least certain sections within an area that extends in the compound filler (MF) and is connected to the supporting structure (TK1) in an end area facing the supporting structure (TK1) in such a way as to transfer moment.

2. The structure as claimed in Claim 1, wherein at least one anchoring device (AV1) has a plurality of anchoring elements (AE1, AE1a) that are arranged one after the other in the direction toward the interior of the compound filler (MF), preferably designed as concrete structures, and are connected together in such a way as to transfer moment.

3. The structure as claimed in Claim 1 or 2, wherein within the transfer of moment between at least one anchoring element (AE1), on the one hand, and at least one adjacent anchoring element or the supporting structure (TK1), on the other, there are at least one tensile-force-transfer element (ZE) and at least one pressure-transfer element (DB).

4. The structure as claimed in Claim 3, wherein at least one pressure transfer element is provided that is able to deform transversely and to bend but is designed to resist buckling.

5. The structure as claimed in one of the preceding claims, wherein within the transfer of moment between at least one anchoring element (AE1), on the one hand, and at least one adjacent anchoring element or the supporting structure (TK1), on the other, there are at least one tensile-force-transfer element (ZE) and at least one area that is located relative to its axis of action (XX) with a gap under the tensile-force-transfer element and that acts as a pressure-transfer element (DB) at the respective anchoring element or the supporting structure (TK1).

6. The structure as claimed in one of Claims 3-5, wherein there is at least one tensile-force-transfer element (ZE) that is designed to deform transversely and to bend.

7. The structure as claimed in one of the preceding claims, wherein at least one anchoring device (AV1) is provided that has at least one compound-filler-support surface (AF) that extends transversely to the resulting weight pressure of the compound filler and is associated with at least one tier (E) of the supporting structure (TK1).

8. The structure as claimed in one of the preceding claims, wherein between at least two at least partially overlapping anchoring devices there is a connection (VZ), designed especially in the form of a gear wheel, that snugly transfers shearing forces.

9. A structure, especially a slope-supporting structure and/or noise-barrier structure, with the following features:

a) the structure comprises at least one essentially rigid supporting structure designed as a projection that has a plurality of support elements arranged one above the other in tiers (E), as well as at least one compound filler that consists at least partially of bonding-agent-free granulate material and/or bulk material and/or soil material;
b) the supporting structure is connected to at least one anchoring device, and preferably several such anchoring devices, that extend into the compound filler;

characterized by the following features:

c) at least one anchoring device (AV2) comprises a plurality of at least partially rigid anchoring elements (AE2) that are preferably designed as concrete structures, are arranged one after the other in the direction from the supporting structure (TK2) into the compound filler (MF), and are connected to one another as well as to the supporting structure (TK2) in such a way as to transfer tensile forces.

10. The structure as claimed one of the preceding claims, wherein the anchoring elements are connected to one another and to the supporting structure in such a way as to be able to swivel and/or to be able to move transversely.

11. The structure as claimed in Claim 10, wherein the anchoring elements are connected to one another and to the supporting structure by means of a transversely deformable or bendable and/or articulated diagonal tie.

12. The structure as claimed in one of the preceding claims, wherein at least one anchoring element, which is designed as a concrete element with rod-type or mesh-type reinforcement, is connected to an adjacent anchoring element and/or to the supporting structure by means of at least one reinforcement section that is run out and is designed as a diagonal tie and/or diagonal strut.

13. A structure, especially a slope-supporting structure and/or noise-barrier structure, with the following features:

a) the structure comprises at least one essentially rigid supporting structure designed as a projection that has a plurality of support elements arranged one above the other in tiers (E), as well as at least one compound filler that consists at least partially of bonding-agent-free granulate material and/or bulk material and/or soil material;

b) the supporting structure is connected to at least one anchoring device, and preferably several such anchoring devices, that extend into the compound filler;

characterized by the following features:

c) at least one flat-material strips (FB) of at least one anchoring device is run at the supporting structure (TK3) in the area of the supporting structure with a gap (AB) between it and a connecting element (ASL) or around said connecting element and this gap is at least partially filled with the material of the compound filler, especially granulate or bulk material.

14. The structure as claimed in Claim 13, wherein the gap between the supporting structure and the flat-material strip is at least approximately 1 cm, and especially at least approximately 2.5 cm.

15. The structure as claimed in Claim 13 or 14, wherein in the area of the gap (AB) between the supporting structure and the flat material strip (FB) at least a portion of the material filler transfers tensile forces from the flat-material strip to the supporting structure.

16. The structure as claimed in one of Claims 13-15, characterized by the fact that the flat-material strip (FB) follows a loop-like path through an opening of an element (ER) in the supporting structure (TK3) that is designed, in particular, as a frame.

17. The structure as claimed in one of Claims 13-16, wherein a loop of the flat-material strip (FB) with its material filler is designed as a cushioning element for transferring compressive forces.

18. The structure as claimed in one of Claims 13-17, characterized by a guide that has two layers at least in certain sections (ZLF) for the flat material strips (FB).

19. The structure as claimed in one of Claims 13-18 and as claimed in Claim 1 or 9, wherein at least one first structure with flat-material anchoring devices is provided as an underlying foundation structure and at least one second structure with solid anchoring devices are provided as a superstructure arranged above it.

20. The structure as claimed in one of Claims 13-18 and as claimed in Claim 1 or 9, wherein at least one first structure with solid anchoring devices is provided as an underlying foundation structure and at least one second structure with flat-material anchoring devices are provided as a superstructure arranged above it.

21. Anchoring element for a structure as claimed in one of the preceding claims, characterized by the fact that said anchoring element is designed as a concrete element with rod-type or mesh-type metal reinforcement and by the fact that at least one section of the reinforcement is run out as a diagonal tie and/or diagonal strut.

22. Anchoring element for a structure as claimed in one of Claims 1-20, and especially an anchoring element as claimed in Claim 19, characterized by that fact that said anchoring

element has an essentially prismatic or billet-like design with a T-shaped or U-shaped cross-section.

23. Anchoring element for a structure as claimed in one of Claims 1-20, and especially an anchoring element as claimed in Claim 21 or 22, characterized by the fact that said anchoring element has an essentially block-like shape, especially with an integrally attached base or cover-wall section.